I claim:

- 1. A transceiver, comprising:
- a transmitting branch;
- a receiving branch;
- a duplex unit connected to said transmitting branch, to said receiving branch and to be connected to an antenna, said duplex unit separating said transmitting branch from said receiving branch;
- a first mixer having an output and an input connected to said receiving branch;
- a first local oscillator connected to said first mixer;
- a receiving intermediate-frequency path connected to said output of said first mixer, said receiving intermediate-frequency path having an intermediate-frequency in a range of 0 to 0.5 megahertz;
- a second mixer having an input and an output connected to said transmitting branch;

a transmitting intermediate-frequency path connected to said input of said second mixer, said transmitting intermediate-frequency path having an intermediate-frequency in a range of 180 megahertz to 200 megahertz; and

a second local oscillator connected to said second mixer.

- 2. The transceiver according to claim 1, wherein the intermediate frequency of said transmitting intermediate-frequency path is selected from the group consisting of 180 megahertz, 185 megahertz, 189.6 megahertz, 189.8 megahertz, 190 megahertz, 190.2 megahertz, 190.4 megahertz, 195 megahertz and 200 megahertz.
- 3. The transceiver according to claim 1, wherein said second mixer is connected to said first local oscillator.
- 4. The transceiver according to claim 1, including a changover switch connected to said first local oscillator, to said second local oscillator and to said second mixer.
- 5. The transceiver according to claim 1, including:
- a third mixer connected to said second mixer;

- a digital-to-analog converter connected to said third mixer; and
- a third local oscillator connected to said third mixer.
- 6. The transceiver according to claim 5, wherein said first local oscillator, said second local oscillator and said third local oscillator in each case have a voltage-controlled oscillator and a phase-locked loop.
- 7. The transceiver according to claim 1, including:
- a first baseband unit connected to said receiving intermediate-frequency path and having a digital mixer which can be detuned in steps of 200 kilohertz; and
- a second baseband unit connected to said transmitting intermediate-frequency path and having a digital mixer which can be detuned in steps of 200 kilohertz.
- 8. The transceiver according to claim 1, wherein the transceiver is a universal mobile telecommunications system transceiver, and said duplex unit has a frequency splitter and a switch connected to said frequency splitter.